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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Timothy J. Cooney et al.	**EXAMINER:**	Charles, D.
SERIAL NO.:	09/832,603	**GROUP ART UNIT:**	3628
FILED:	April 11, 2001	**ATTY DKT NO.:**	D5045

TITLE: OUGHTA COST PURCHASING PROCESS

CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on or before May 1, 2006.

May 1, 2006
Date

Susan L. Lukasik
Susan L. Lukasik

Commissioner for Patents
Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF TRANSMITTAL LETTER

Dear Sir:

Transmitted herewith is an Appeal Brief under 37 C.F.R. §41.37 for the above captioned patent application. The fee required under 37 C.F.R. 41.20(b)(2) is **$500.00**. The Director is hereby authorized to charge any fees that my be required, or credit any overpayment, to **Deposit Account No. 14-0603**. One additional copy of this sheet is enclosed.

Respectfully submitted,

Date: May 1, 2006 By: Susan L. Lukasik

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Susan L. Lukasik
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Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 C.F.R. §41.37

Sir:

I. REAL PARTY IN INTEREST

International Engine Intellectual Property Company, L.L.C. is the assignee of the present invention.

II. RELATED APPEALS AND INTERFERENCES

None known.

III. STATUS OF CLAIMS

This application was filed with 11 claims, and 9 additional claims were added by amendment. Claims 1-20 are pending, and claims 1-20 stand twice rejected. The rejection of claims 1-20 is appealed.

IV. STATUS OF AMENDMENTS

No amendments to the claims were filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A. Brief Summary

Traditionally, when a business desires to have a part made for them by a supplier, they provide a number of potential suppliers with a disclosure of the part and other relevant information and ask them to submit a quote. A quoting process provides prices at which the suppliers wish to sell the part, and there is no rational basis to assume a) that the quoted price is based upon what the cost to produce the part is or b) that the price is competitive. Most buyers, and most sellers for that matter, do not know what the "lowest possible cost" is for the product they are buying (or selling). [Paragraph 2; page 1, lines 10-22, as amended]

Product, service, or process cost is often derived from a standard cost system that has a number of faults that prevent it from being a reliable source for determining what the cost ought to be. For example, standard cost usually is an average cost for a number of products, processes, or services. Thus, the lowest quote is not necessarily what the cost of the part ought to be. Factors that affect what the cost of a part ought to be include the design itself, the purchase cost of materials, the quality of the part, the productivity of the manufacturing process, the location of the manufacturing facility and the labor and operating cost. [Paragraph 3; page 1, lines 23-32]

The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers works with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-29, emphasis added]

This program is intended to determine what the cost of a part ought to be and not what its sale price ought to be. The supplier of the part would, of course, add to the cost an amount that represents his profit. [Paragraph 9; page 2, lines 30-32, emphasis added]

The first step in establishing what the cost of a particular part ought to be is for a technically qualified individual to review the engineering drawing and/or an actual prototype of the part for which the ought-to-be cost is sought. The technically qualified individual may actually be several individuals from different disciplines of the organization. For example, product engineers, manufacturing experts, logistics experts, financial experts and purchasing experts may all contribute to the development of what the cost ought to be for a particular part or process. The computer program is ideally networked so that it is available to all those in the organization that may contribute to or

use the final results. [Paragraph 10; page 3, lines 1-13; Paragraph 12; page 3, lines 17-22]

After all necessary data has been prepared and is ready to be loaded into the program, team members can log on to the system and input the information discussed and collected at the team meeting. Default data, displayed from drop down menus or in data tables which are supplied from data bases either purchased or built internally. All database driven data can be overridden and then used only for the particular study for which it was overridden. [Paragraph 103; page 9, line 30 through page 10, line 4]

The system is provided on a network to which the personnel from all necessary disciplines have access. FIG. 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. The router 24 interconnects the Divisional Local Area Network to the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. As seen in FIG. 1A the name of some of the databases contained in the system server 10 include the prefix "BIC" which is an acronym for BEST IN CLASS. Some of these databases are created specifically for this system while other databases are purchased from private or public sources. The databases discussed herein are identified in FIG. 1A, however, for other embodiments and other parts or processes, other or additional databases would be required. Individuals located at the plant are served by a local area network 12. These individuals utilize local display stations 18 to access the Ought Cost system, gather additional information from the plant Main Frame Computer 16 and use local printers 20 to print reports. Other contributors and users of the system in remote locations use their local facilities and display stations to input data, display information, and print reports from their local printers 28 from the Oughta Cost system. All corporate locations are connected to a wide area network and are provided access to the Oughta Cost system through a router 24 that links the local area network with the wide area network. The linkage of the two networks allows local, remote and external access into the Ought Cost system. Also the plant Main Frame Computer 16 and the Corporate Main Frame Computer 22 are tied together providing an extended pool of data available to all Oughta Cost Users. [Paragraph 104; page 10, lines 5-12; also Paragraph 105; page 10, line 13 through page 11, line 3]

A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, allow the operator to select appropriate items by merely clicking on them. The screens may also

include fields into which the operator inputs data that has been calculated for this specific part. These and other methods for inputting data are interchangeable and a screen disclosed herein having a field into which an operator can input data could be changed to a pull down menu if and when sufficient data is available. [Paragraph 13; page 3, lines 23-30]

FIG. 2 through FIG. 18 are illustrations of the computer screens that can be selected from the computer program and into which cost components are inputted. All of the screens of this program are interactive, thus if an improvement is made in a screen that has been completed, the screen can be updated and the change is reflected in all other applicable screens. [Paragraph 108; page 11, lines 19-22]

The Material screen, as seen in FIG. 3, includes a Material Table at the bottom of the screen. As seen in FIG. 4, as a result of selecting Steel Forging in FIG. 3, information automatically populates the Material Table section. Also seen in FIG. 4, the drop down menu for Supplier Scrap is opened. The drop down menu containing a variety of percentages. The drop down menus generally include a default selection that includes the Best in Class for the subject of the drop down menu. The operator has the option to accept the default best in class supplier scrap rate or select another percentage. [Paragraph 115; page 13, lines 5-14, as amended]

The Material screen is also shown in FIG. 5. The prior two selections are shown and the operator selected Fabrication Waste that produces a drop down menu of percentages. The data for this drop down menu may be a purchased or may be an internally developed data base. The operator has the option to select the default best in class fabrication waste rate or select a rate. The operator has selected the highlighted "best in class" rate of 5%. Once the material yield weight, supplier scrap rate and fabrication waste rate has been entered, the system calculates the total item weight needed. [Paragraph 116; page 13, lines 15-21]

As seen in FIG. 7, the Freight Rate/CWT of 1.00 representing the best in class rate was selected. The computer program has also calculated that the cost of the material is $49.95 (not shown) and the Freight Cost of $1.11 is calculated. The program adds these costs and displays $51.06 as the Total Material Cost in the appropriate field. [Paragraph 118; page 13, lines 26-29]

The Labor Section, for example, includes several pull down menus listing various skilled tradesmen, best in class pay scales, and the cost of their benefits. Factors included for scrap and rework and the material cost are calculated. Best in class labor rates, both direct and indirect, are applied to the times determined for the manufacturing process and a factor for employee benefits is added to determine total hourly cost. Best in class practices, processes, labor rates, uptimes and yields are used to guard against the

potential supplier basing their cost figures on their current processes. [Paragraph 14; page 3, line 31 through page 4, line 8; see also Paragraph 125; page 14, line 28 through page 15, line 8, as amended]

The Capital section of the program allows the input of capital investments that are required for machines and increase capacity to manufacture the part, and the computer program computes the amount of depreciation to be charged to each part. The results of these calculations are used when inputting data to the Overhead screen. A database may be provided that would provide best in class data for items such as cost of different types of equipment, square-foot cost of green field plant construction by region and cost of furnishings. [Paragraph 15; page 4, lines 9-13; and Paragraph 127; page 15, lines 15-26, as amended]

The program includes a Manufacturing Screen where the required volume for the component being processed is inputted and the uptime for current and world class manufacturing machines can be selected from drop down menus or data bases. This screen also includes fields for entering the required manufacturing time as well as work days per year, work shifts per day, and work hours per shift that are required to accomplish the manufacturing task. As seen in FIG. 11, which is another view of the Manufacturing screen, the operator has selected 50% from the Uptime Current drop down menu and the drop down menu for the Uptime World Class has been opened. FIG. 13 is another view of the Manufacturing screen. In this view, the operator selected 0% from the Scrap Rate drop down menu. [Paragraph 16; page 4, lines 15-22; Paragraph 128; page 15, line 31 through page 16, line 1, as amended; and Paragraph 130; page 16, lines 10-11]

The Overhead Screen for the Shaft is shown in FIG. 15. The overhead section captures miscellaneous expenses, depreciation and startup costs. Depreciation costs for each asset is collected in a table contained in this screen. Asset Class and Asset Value are carried forward from the Capital screen and automatically entered in this screen. Class and component Depreciation are calculated once the Depreciation Schedule and the component utilization rate have been specified. The operator has selected 0.1% from the drop down menu. General overhead is applied by selecting a percentage from a drop down menu in the Additional Expenses section. [Paragraph 132; page 16, lines 28 through page 17, line 8; Paragraph 17; page 4, lines 24-25]

A Reports Section has been included in the program, as shown in FIG. 17 and FIG. 18. This section is used to select desired reports for partial or complete report on the process. Reports can be run for a part or a group of components that make up a part. If necessary, components' costs can be refined by evaluating effect of changes to one or more of the elements making up the total cost and re-running reports to determine the

optimal Oughta cost target. The reports can then be viewed, printed or saved to a file for future analysis or dissemination. [Paragraph 18; page 4, lines 29-32; also Paragraph 135; page 17, lines 17-28]

The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages, depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3]

Total Material Cost = Raw Material Cost Per Piece X Total Number Pieces Required + Total Freight Cost [Paragraph 22; page 5, lines 6-7]

Total Freight Cost = Per Piece Freight Cost X Total Number of Pieces Required + Dunage + Insurance [Paragraph 23; page 5, lines 8-9]

Total Labor Cost = Total Direct Labor Cost + Total Non-direct Labor Cost (Skilled Trades Support + Indirect) + Total Direct Benefits + Total Non-Direct Benefits [Paragraph 27; page 5, lines 13-14]

Total Direct Labor Cost = Direct Labor Wages + Direct Labor Benefits [Paragraph 28; page 5, line 15]

Direct Labor Wages = (# Equivalent Labor Type 1 Required X Wages 1 X Hours Worked per Year) + (# Equivalent Labor Type 2 Required X Wages 2 X Hours Worked per Year) + (# Equivalent Labor Type n Required X Wages n X Hours Worked per Year) [Paragraph 31; page 5, lines 18-20]

Direct Labor Benefits = (# On-Roll Labor Type 1 Required X Benefits per Person) + (# On-Roll Labor Type 2 Required X Benefits 2 per Person) + (# On-Roll Labor Type n Required per Person) [Paragraph 32; page 5, lines 21-22]

Total Non-direct Labor Cost = Non-direct Labor Wages + Non-direct Labor Benefits [Paragraph 33; page 5, line 23]

Total Non-direct Labor Wages = (# Equivalent Skilled Trade 1 Required X Wages 1 X Hours Worked per Year) + (# Equivalent Skilled Trade 2 Required X Wages 2 X Hours Worked per Year) + (# Equivalent Skilled Trade n Required X Wages n X Hours Worked per Year) + (# Equivalent Indirect 1 Required X Wages 1 X Hours Worked per Year) + (# Equivalent Indirect 2 Required X Wages 2 X Hours Worked per Year) +(# Equivalent Indirect n Required X Wages n X Hours Worked per Year) [Paragraph 34; page 5, lines 24-28]

Total Indirect Labor Benefits = (# On-Roll Skilled Trade 1 Required X Benefits per Person) + (# On-Roll Skilled Trade 2 Required X Benefits 2 per Person) + (# On-Roll Skilled Trade n Required X Benefits n per Person) +(# On-Roll Indirect 1 Required X Benefits 1 per Person) + (# On-Roll Indirect 2 Required X Benefits 2 per Person) + (# On-Roll Indirect n Required X Benefits n per Person) [Paragraph 35; page 5, lines 29-32]

Per Piece Direct Labor Wage Cost = Direct Labor Wages1/# Good Pieces Produced per Year) + (Direct Labor Wages 2/# Good Pieces Produced per Year) + (Direct Labor Wages n/# Good Pieces Produced per Year) [Paragraph 36; page 5, lines 33-35]

Per Piece Direct Labor Benefits Cost = (Direct Labor Benefits 1/# Good Pieces Produced per Year) + (Direct Labor Benefits 2/# Good Pieces Produced per Year) + (Direct Labor Benefits n/# Good Pieces Produced per Year) [Paragraph 37; page 5, lines 36-38]

Per Piece Indirect Labor Cost = (Total Non-direct Labor Wage Cost 1/# Good Pieces Produced per Year) + (Total Non-direct Labor Wage Cost 2/# Good Pieces Produced per Year) + (Total Non-direct Labor Wage Cost n/# Good Pieces Produced per Year) [Paragraph 38; page 5, lines 39-41]

Per Piece Indirect Labor Benefits Cost = (Total Non-direct Labor Benefits 1/# Good Pieces Produced per Year) + (Total Non-direct Labor Benefits 2/# Good Pieces Produced per Year) + (Total Non-direct Labor Benefits n/# Good Pieces Produced per Year) [Paragraph 39; page 6, lines 1-3]

Capital Depreciation = General Capital Cost $/ Useful Life (years) + Machining Capital Cost/Useful Life (years) [Paragraph 40; page 6, lines 4-5]

Capital Depreciation Attributed to a Part = Capital Depreciation/Annual Capacity in Pieces [Paragraph 41; page 6, line 6]

Percent Uptime = Net Good Pieces per Scheduled Unit of Time/Max. Number of Good Pieces per Scheduled Unit of Machine Time X 100 [Paragraph 43; page 6, lines 9-10]

Capacity Potential (Additional # Pieces) = Manufacture Time Available/ Cycle Time X (World Class Uptime - Current Uptime) [Paragraph 47; page 6, lines 16-17]

Total Overhead = General Overhead + Utilities + Warranty + Engineering Support + Indirect Materials [Paragraph 48; page 6, line 18]

Total Manufacturing Cost = Total Labor Cost + Material Cost + General Overhead + Utilities + Indirect Material + Depreciation [Paragraph 50; page 6, lines 22-23]

Per Piece Overhead = Total Overhead/Volume Good Pieces [Paragraph 53; page 6, line 26]

Total Purchase Price = Per Piece Purchase Price X Volume [Paragraph 56; page 6, line 30]

Purchase Price = Oughta Cost + Gross Profit [Paragraph 57; page 6, line 31]

Project Oughta Cost = Part 1 Oughta Cost + Part 2 Oughta Cost + Part n Oughta Cost [Paragraph 59; page 6, line 33]

Oughta Cost of an Assembly = Component 1 Oughta Cost + Component 2 Oughta Cost + Component n Oughta Cost + Assembly Oughta Cost + Shipping Oughta Cost (if buying an assembly) [Paragraph 60; page 6, lines 34-35]

Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]

The program for determining what the cost of a part ought to be has numerous benefits, some of which are: [Paragraph 62; page 6, lines 38-39]

informing the user of the program what the part or the change in the part should actually cost; [Paragraph 63; page 6, line 40]

providing a parts buyer with all of the factual information required to negotiate a fair business deal; [Paragraph 64; page 6, line 41]

taking the guesswork out of costing and design changes; [Paragraph 71; page 7, line 7]

eliminating the practice of a supplier initially quoting a high price and lowering it in increments until the customer accepts a price that is higher than it ought to be; [Paragraph 73; page 7, lines 10-22]

substantially shortening the time involved to arrive at the product, process or service cost; [Paragraph 76; page 7, line 15]

it provides the basis for developing a solid target cost. [Paragraph 78; page 7, line 18]

After the cost that a part ought to be has been determined, discussions are initiated with potential suppliers. The manufacturing processes and the supply chain management techniques used to develop the ought-to-be cost, along with all other data that went into the ought-to-be cost, are disclosed. The supplier is given the opportunity to explain how his price was arrived at and the individual components of the two total costs would be compared. In this way, it would become apparent which components are responsible for the differences. For example, if the supplier includes a figure for delivering the part to the purchaser that is considerably higher than the amount used for delivering in the ought to cost total, this cost would be scrutinized by both parties. The result may be that the supplier could engage a different carrier or open a new facility closer to the customer and reduce this cost. Another possibility is that the supplier is using obsolete methods or tools, and his cost could be brought in line with the ought to cost figure if he used a new process and new machines. When a supply agreement is finalized the complete results of the study are provided to the supplier for their use in providing the part or service. [Paragraph 81; page 7, line 23 through page 8, line 7; Paragraph 138; page 18, lines 5-12]

B. Examples from the specification are provided in support of the independent claims.

1. A method of doing business in which the cost of a component, service or process is established by:	An initial team meeting would generally be scheduled at which the team examines the product, service or process to be analyzed and costed. [Paragraph 102; page 9, lines 17-18] the process can be conducted for any part/process made by any process. Furthermore, the "Oughta Cost" process is equally applicable to what the cost of a process or a service ought to be and thus can also be used in the service industry. [Paragraph 107; page 11, lines 16-18]
using a computerized process that includes databases from which aspects of the cost are capable of being determined, provided lowest cost potential design, lowest cost potential manufacturing practices, lowest cost potential supply chain management techniques, lowest cost potential labor rates, lowest cost potential uptimes and lowest cost potential yields are utilized;	Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19] a system by which a firm seeking quotes from other firms to supply parts can, themselves, determine what the cost of a part ought to be assuming that the supplier uses the best design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields. [Paragraph 5; page 2, lines 5-8] The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28]
determining, by the computerized process, a lowest potential cost for each of a plurality of aspects of the cost and totaling the lowest potential cost for each of a plurality	The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28]

of aspects, yielding the ought to be cost;	Total Manufacturing Cost = Total Labor Cost + Material Cost + General Overhead + Utilities + Indirect Material + Depreciation [Paragraph 50; page 6, lines 22-23] Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37] A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. [Paragraph 13; page 3, lines 23-25]
generating reports from said computerized process that include details of each aspect of the cost;	Reports can be generated for the entire study, a component, a group of components or an assembly. This section allows for a wide variety of reports to be generated for one or multiple items by checking the appropriate box or boxes. The reports can then be viewed, printed or saved to a file for future analysis or dissemination. Reports can be produced for a part or a group of parts and from one or more sections or to the complete package. If necessary, component costs can be refined by evaluating effect of changes to one or more of the elements making up the total cost and re-running reports to determine if the desired results were achieved. Changes can be made to the program by selecting the Existing Costing Program option. Once all the inputs have been made, the Report screen can be selected, Program Number selected and a particular report can be requested. In Figure 17 the Program drop down menu has been opened and the menu displays the programs that are available. [Paragraph 135; page 17, lines 18-28]
providing the reports to prospective suppliers of the component or service;	When the Oughta cost team is satisfied with the results, and the supplier has not participated, the results of the study would then be shared with the supplier for review so that cost discussions will occur based on facts rather than negotiating skill. [Paragraph 138; page 18, lines 5-7]
conducting discussions, with the prospective suppliers of the component or service, in an effort to gain concurrence on the fact basis of what the cost of the component, service or process ought to	When the Oughta cost team is satisfied with the results, and the supplier has not participated, the results of the study would then be shared with the supplier for review so that cost discussions will occur based on facts rather than negotiating skill. In some instances suppliers will disagree with some of the facts upon which the study is based. Discussions between the purchaser and the supplier can then be conducted to resolve these fact issues. Further research and discussions may be necessary to resolve differences however these discussions relate to factual matters that can be resolved to the satisfaction

be;	of both sides. When a supply agreement is finalized the complete results of the study are provided to the supplier for their use in providing the part or service. [Paragraph 138; page 18, lines 5-12]
conducting fact based discussions, with prospective suppliers of the component or service with whom concurrence on the cost has been reached, in an effort to reach an agreement on a price for the component, service or process based on the ought to be cost of the component, service or process.	When the Oughta cost team is satisfied with the results, and the supplier has not participated, the results of the study would then be shared with the supplier for review so that cost discussions will occur based on facts rather than negotiating skill. In some instances suppliers will disagree with some of the facts upon which the study is based. Discussions between the purchaser and the supplier can then be conducted to resolve these fact issues. Further research and discussions may be necessary to resolve differences however these discussions relate to factual matters that can be resolved to the satisfaction of both sides. When a supply agreement is finalized the complete results of the study are provided to the supplier for their use in providing the part or service. [Paragraph 138; page 18, lines 5-12]

2. In a computerized system, a method of determining what the cost of a part or service ought to be, the method comprising:	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. [Paragraph 13; page 3, lines 23-24]
establishing one or more databases that store a plurality costs distributed among each of a plurality of cost components that are utilized for producing parts and services, wherein the cost components include one or more of: design, manufacturing practices, supply chain management techniques, labor rates, uptimes, and yields;	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, will allow the operator to select appropriate items by merely clicking on them. The screens may also include fields into which the operator will input data that has been calculated for this specific part. [Paragraph 13; page 3, lines 23-28] Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to

	the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19] The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28]
providing a database interface for the database that allows remote access by one or more users;	the system is provided on a network to which the personnel from all necessary disciplines have access. [Paragraph 104; page 10, lines 8-9] Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19]
establishing a set of computer screens, including input fields into which cost components are capable of being inputted either directly or through menus that display options that are capable of being selected, wherein the cost components are elements of cost areas such as material, labor, capital, manufacturing and overhead;	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, will allow the operator to select appropriate items by merely clicking on them. The screens may also include fields into which the operator will input data that has been calculated for this specific part. [Paragraph 13; page 3, lines 23-28]

for each cost area, totaling a lowest cost potential for each cost component, yielding a plurality of subtotals;	Total Material Cost = Raw Material Cost Per Piece X Total Number Pieces Required + Total Freight Cost [Paragraph 22; page 5, lines 6-7] Total Labor Cost = Total Direct Labor Cost + Total Non-direct Labor Cost (Skilled Trades Support + Indirect) + Total Direct Benefits + Total Non-Direct Benefits [Paragraph 27; page 5, lines 13-14] Total Direct Labor Cost = Direct Labor Wages + Direct Labor Benefits [Paragraph 28; page 5, line 15] Total Non-direct Labor Cost = Non-direct Labor Wages + Non-direct Labor Benefits [Paragraph 33; page 5, line 23] Capital Depreciation = General Capital Cost $/ Useful Life (years) + Machining Capital Cost/Useful Life (years) [Paragraph 40; page 6, lines 4-5] Total Overhead = General Overhead + Utilities + Warranty + Engineering Support + Indirect Materials [Paragraph 48; page 6, line 18]
totaling each of the plurality of subtotals, yielding a lowest potential cost that is the ought to be cost of the part or service.	Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]

5. A computer system for determining what the cost of a part or service ought to be, said computer system comprising:	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. [Paragraph 13; page 3, lines 23-24]
a computer program that provides for cost data entry, is capable of interfacing with a database or databases and is capable of being accessed by one or more users, said computer program being programmed to perform computations on data	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, will allow the operator to select appropriate items by merely clicking on them. The screens may also include fields into which the operator will input data that has been calculated for this specific part. [Paragraph 13; page 3, lines 23-28] the system is provided on a network to which the personnel from all necessary disciplines have access. [Paragraph 104;

that has been input manually or from a database;	page 10, lines 8-9] Some of these databases will be created specifically for this system while other databases will be purchased from private or public sources. Also, it should be noted that the databases used in the preferred embodiment discussed herein are identified in Figure 1A, however for other embodiments and other parts or processes other or additional databases would be required. Individuals from various disciplines such as Engineering, Manufacturing, Accounting, Purchasing and Transportation will contribute and use this system. Individuals located at the plant are served by a local area network 12. These individuals will utilize local display stations 18 to access the Ought Cost system, gather additional information from the plant Main Frame Computer 16 and use local printers 20 to print reports. Other contributors and users of the system in remote locations will use their local facilities and display stations to input data, display information and print reports from their local printers 28 from the Oughta Cost system. [Paragraph 105; page 10, lines 20-30]
a database that is capable of interfacing with said computer program, the database containing cost components for parts;	The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 18-19] The necessary data for the data entry fields would be prepared and loaded into the program. [Paragraph 102; page 9, lines 11-29; see also FIG. 1A] Figures 2 through 18 are illustrations of the computer screens that can be selected from the computer program and into which cost components are inputted. [Paragraph 108; page 11, lines 19-20]
one or more computer screens for said computer program including input fields into which lowest cost potential cost components are capable of being inputted and menus that display list of selectable cost components from said database;	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, will allow the operator to select appropriate items by merely clicking on them. The screens may also include fields into which the operator will input data that has been calculated for this specific part. [Paragraph 13; page 3, lines 23-28]
said computer program having the capability to	Total Material Cost = Raw Material Cost Per Piece X Total Number Pieces Required + Total Freight Cost [Paragraph 22;

determine a lowest cost potential for each of a plurality of cost components and to total each of the plurality of lowest cost potential cost components, yielding the ought to be cost of the part or service.	page 5, lines 6-7] Total Labor Cost = Total Direct Labor Cost + Total Non-direct Labor Cost (Skilled Trades Support + Indirect) + Total Direct Benefits + Total Non-Direct Benefits [Paragraph 27; page 5, lines 13-14] Total Direct Labor Cost = Direct Labor Wages + Direct Labor Benefits [Paragraph 28; page 5, line 15] Total Non-direct Labor Cost = Non-direct Labor Wages + Non-direct Labor Benefits [Paragraph 33; page 5, line 23] Capital Depreciation = General Capital Cost $/ Useful Life (years) + Machining Capital Cost/Useful Life (years) [Paragraph 40; page 6, lines 4-5] Total Overhead = General Overhead + Utilities + Warranty + Engineering Support + Indirect Materials [Paragraph 48; page 6, line 18] Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]

8. A method of using a computer to develop a factual report used in fact driven discussions with a supplier in an effort to establish what the cost of a part or service ought to be, comprising the steps of:	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. [Paragraph 13; page 3, lines 23-25] Reports can be generated for the entire study, a component, a group of components or an assembly. This section allows for a wide variety of reports to be generated for one or multiple items by checking the appropriate box or boxes. The reports can then be viewed, printed or saved to a file for future analysis or dissemination. Reports can be produced for a part or a group of parts and from one or more sections or to the complete package. If necessary, component costs can be refined by evaluating effect of changes to one or more of the elements making up the total cost and re-running reports to determine if the desired results were achieved. Changes can be made to the program by selecting the Existing Costing Program option. Once all the inputs have been made, the Report screen can be selected, Program Number selected and a particular report can be requested. In Figure 17 the Program drop down menu has been opened and the menu displays the programs that are

	available. [Paragraph 135; page 17, lines 18-28] When the Oughta cost team is satisfied with the results, and the supplier has not participated, the results of the study would then be shared with the supplier for review so that cost discussions will occur based on facts rather than negotiating skill. In some instances suppliers will disagree with some of the facts upon which the study is based. Discussions between the purchaser and the supplier can then be conducted to resolve these fact issues. [Paragraph 138; page 18, lines 5-9]
identifying and quantifying the cost components of a part or step of a process that, when totaled, determine what the cost of the part or process ought to be provided the lowest cost potential design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields;	The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28]
inputting into the computer a plurality of possible costs for the cost components;	The screens may also include fields into which the operator will input data that has been calculated for this specific part. These and other methods for inputting data are interchangeable and a screen disclosed herein having a field into which an operator can input data could be changed to a pull down menu if and when sufficient data is available [Paragraph 13; page 3, lines 26-33; see also FIG. 2-18]
making necessary calculations for each component of the part or step in the process;	The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages, depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3]
determining the lowest cost potential for each component of the part or step of the process;	The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. [Paragraph 8; page 2, lines 24-25] The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages,

	depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3]
totaling the lowest cost potential for each of the cost components and recording this as an ought-to-be cost;	Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]
outputting from the computer program a report that specifies the cost of each part or process and how each component of this cost was established; and	A Reports Section has been included in the program. This section is used to select desired reports for partial or complete report on the process. This can be done for a part or a group of components that make up a part. If necessary, components' costs can be refined by evaluating effect of changes to one or more of the elements making up the total cost and re-running reports to determine the optimal Oughta cost target. [Paragraph 18; page 4, lines 29-32; see also FIG. 17 and FIG. 18]
utilizing this report in cost driven discussions with a supplier to obtain an agreement with the supplier to provide parts or services at a price that is based upon the ought-to-be cost.	When the Oughta cost team is satisfied with the results, and the supplier has not participated, the results of the study would then be shared with the supplier for review so that cost discussions will occur based on facts rather than negotiating skill. In some instances suppliers will disagree with some of the facts upon which the study is based. Discussions between the purchaser and the supplier can then be conducted to resolve these fact issues. Further research and discussions may be necessary to resolve differences however these discussions relate to factual matters that can be resolved to the satisfaction of both sides. When a supply agreement is finalized the complete results of the study are provided to the supplier for their use in providing the part or service. [Paragraph 138; page 18, lines 5-12]

9. A method of using a computer to facilitate identifying and quantifying cost components of a part or service, the method comprising the following steps:	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. [Paragraph 13; page 3, lines 23-25]
utilizing a computer program that is capable of interfacing with one or more databases, said computer program being available on a network that allows	Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to

remote access by one or more users;	the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19] the system is provided on a network to which the personnel from all necessary disciplines have access. [Paragraph 104; page 10, lines 8-9]
establishing a database that interfaces with said computer program, the database containing fact-based cost components that are utilized to calculate what the cost ought to be provided the lowest cost potential design, lowest cost potential manufacturing practices, lowest cost potential supply chain management techniques, lowest cost potential labor rates, lowest cost potential uptimes and lowest cost potential yields;	The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28] A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, will allow the operator to select appropriate items by merely clicking on them. The screens may also include fields into which the operator will input data that has been calculated for this specific part. [Paragraph 13; page 3, lines 23-28] The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 18-19]
establishing a set of computer screens for said computer program including input fields into which component cost is capable of being inputted and menus that display options of component cost from said database, wherein the cost components are elements of cost areas such as material, labor, capital,	A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. The computer screens have pull down menus that, for example, will allow the operator to select appropriate items by merely clicking on them. The screens may also include fields into which the operator will input data that has been calculated for this specific part. [Paragraph 13; page 3, lines 23-28]

manufacturing and overhead;	
wherein the computer program has the capability of making any necessary calculations for each cost component, determining a lowest cost potential for each cost component, and totaling the lowest cost potential for each cost component, thereby yielding the ought-to-be cost of the part or service.	The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages, depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3] Total Material Cost = Raw Material Cost Per Piece X Total Number Pieces Required + Total Freight Cost [Paragraph 22; page 5, lines 6-7] Total Labor Cost = Total Direct Labor Cost + Total Non-direct Labor Cost (Skilled Trades Support + Indirect) + Total Direct Benefits + Total Non-Direct Benefits [Paragraph 27; page 5, lines 13-14] Total Direct Labor Cost = Direct Labor Wages + Direct Labor Benefits [Paragraph 28; page 5, line 15] Total Non-direct Labor Cost = Non-direct Labor Wages + Non-direct Labor Benefits [Paragraph 33; page 5, line 23] Capital Depreciation = General Capital Cost $/ Useful Life (years) + Machining Capital Cost/Useful Life (years) [Paragraph 40; page 6, lines 4-5] Total Overhead = General Overhead + Utilities + Warranty + Engineering Support + Indirect Materials [Paragraph 48; page 6, line 18] Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]

13. A method comprising the steps of:	The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. [Paragraph 8; page 2, lines 24-29]
determining a design for a part;	The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28] The first step in establishing what the cost of a particular part ought to be is for a technically qualified individual to review the

	engineering drawing and/or an actual prototype of the part for which the ought-to-be cost is sought. [Paragraph 10; page 3, lines 1-3]
determining, by a computer, a lowest cost potential from a plurality of costs for at least two manufacturing factors for manufacturing the part, wherein the at least two manufacturing factors include at least two of: manufacturing practices to manufacture the part, supply chain management techniques to supply the part, labor rates to make the part, uptime for equipment utilized to manufacture the part, yields of manufacturing the part, overhead, freight, and equipment utilized to manufacture the part;	Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19] a system by which a firm seeking quotes from other firms to supply parts can, themselves, determine what the cost of a part ought to be assuming that the supplier uses the best design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields. [Paragraph 5; page 2, lines 5-8] The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28]
combining, by a computer, the lowest cost potential for at least the at least two manufacturing factors, yielding an ought-to-be cost for the part.	The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages, depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3] Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]

15. A method	The fundamental concept of the "Oughta Cost" process is to

comprising the steps of:	develop the lowest cost potential for a part. [Paragraph 8; page 2, lines 24-29]
determining a first design for a part;	The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28] The first step in establishing what the cost of a particular part ought to be is for a technically qualified individual to review the engineering drawing and/or an actual prototype of the part for which the ought-to-be cost is sought. [Paragraph 10; page 3, lines 1-3]
determining, by a computer, a lowest cost potential for the first design for each of two or more of a plurality of manufacturing factors for manufacturing the part, wherein the plurality of manufacturing factors includes: labor rates, material costs, overhead costs, capital costs, fabrication waste rates, uptime for equipment utilized to manufacture the part, and yields of manufacturing the part;	Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19] a system by which a firm seeking quotes from other firms to supply parts can, themselves, determine what the cost of a part ought to be assuming that the supplier uses the best design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields. [Paragraph 5; page 2, lines 5-8] The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28] A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. [Paragraph 13; page 3,

	lines 23-25] The Material screen is again shown again in Figure 5. In this screen, the prior two selections are shown and the operator has selected Fabrication Waste which produces a drop down menu of percentages. The data for this drop down menu could be a purchased or an internally developed data base. Again the operator has the option to select the default best in class fabrication waste rate or select a rate. The operator has selected the highlighted "best in class" rate of 5%. Once the material yield weight, supplier scrap rate and fabrication waste rate has been entered, the system will calculate the total item weight needed. [Paragraph 116; page 13, lines 15-21]
generating, by the computer, an ought-to-be cost for the part from the lowest cost potential for the first design for each of the two or more manufacturing factors;	The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages, depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3] Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-37]
determining a purchase price with at least one supplier while utilizing the ought-to-be cost.	the suppliers must utilize the best design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields in order to profitably supply parts at a price that is based upon the ought-to-be cost. [Paragraph 7; page 2, lines 19-21] It should be noted that this program is intended to determine what the cost of a part ought to be and not what its sale price ought to be. The supplier of the part would, of course, add to the cost an amount that represents his profit. [Paragraph 9; page 2, lines 30-32] When a supply agreement is finalized the complete results of the study are provided to the supplier for their use in providing the part or service. [Paragraph 138; page 18, lines 11-12]

18. A method comprising the steps of:	The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. [Paragraph 8; page 2, lines 24-29]
by a computer, identifying a plurality of cost components of a part and determining, from	Figure 1A and 1B when combined discloses a preferred embodiment of a system diagram. This preferred embodiment depicting the Oughta Cost system server 10, the Local Area Network 12, the Wide Area Network 14, the internet connection and other computers/systems available on the network. To

among a plurality of costs for the plurality of cost components, a lowest cost potential for each of the plurality of cost components of the part, wherein the cost components include costs related to at least one of material, labor, capital, machining, and overhead;	view this complete system Figure 1B should be placed below Figure 1A. The router 24, that is shown in both Figure 1A and Figure 1B, interconnects the Divisional Local Area Network to the Corporate Wide Area Network. The system server 10 includes the application programs and the various databases that are utilized by the system. [Paragraph 105; page 10, lines 13-19] The fundamental concept of the "Oughta Cost" process is to develop the lowest cost potential for a part. The process to determine this cost facilitates a situation in which the supplier or suppliers will work with the purchaser to develop a state-of-art design, using the best design, manufacturing practices, location, energy cost, transportation, supply chain management techniques, labor rates, uptimes and yields for the type of part being manufactured. [Paragraph 8; page 2, lines 24-28] A computer program having a number of computer screens has been developed which enables an operator or operators to develop what the cost of a part ought to be. The program includes separate screens for Material, Labor, Capital, Manufacturing, Overhead and Reports. [Paragraph 13; page 3, lines 23-25] Figure 8 shows a completed Labor screen and indicates that it is the screen for the component Shaft. This screen includes sections for Supporting Services, Machining Type, Additional Labor, Region and Skill Level. Each of these sections has a drop down menu and a selection has been made where appropriate. For example the North region and a Standard Machining Skill Level have been selected from the drop down menus. [Paragraph 124; page 14, lines 21-25] The Capital Screen has sections for General Capital and Machining Capital. In the General Capital section, dollar amounts have been inputted for Building Expansion, Furniture and a PC. In the Machining Capital, dollar amounts have been inputted for Rough Cut, Drill and Final Cut. [Paragraph 127; page 15, lines 23-26]
totaling, by a computer, the lowest cost potential for each of the plurality of cost components of the part, resulting in an ought-to-be cost for the part;	The system makes various calculations using data that has been inputted into a study. The following are formulas, that are imbedded in the program, and used by the program to calculate other weights, values, cost, requirements, benefits, wages, depreciation, times, rates, prices, profits and cost: [Paragraph 19; page 5, lines 1-3] Total Oughta Cost of a Component = Material Cost (Including Freight) + Labor (Direct & Non-direct) + Depreciation (Plant & Equipment) + Total Overhead [Paragraph 61; page 6, lines 36-

	37]
engaging in cost-driven discussions with a supplier to obtain an agreement with the supplier to provide parts at a price that is based upon the ought-to-be cost.	When the Oughta cost team is satisfied with the results, and the supplier has not participated, the results of the study would then be shared with the supplier for review so that cost discussions will occur based on facts rather than negotiating skill. In some instances suppliers will disagree with some of the facts upon which the study is based. Discussions between the purchaser and the supplier can then be conducted to resolve these fact issues. Further research and discussions may be necessary to resolve differences however these discussions relate to factual matters that can be resolved to the satisfaction of both sides. When a supply agreement is finalized the complete results of the study are provided to the supplier for their use in providing the part or service. [Paragraph 138; page 18, lines 5-12]

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 8, and 13-20 stand rejected under 35 U.S.C. §103(a) given Burns et al. (U.S. Patent No. 5,062,104) in view of Horie (U.S. Patent No. 5,546,564). Claims 2-7 and 9-12 stand rejected under 35 U.S.C. §103(a) in view of Burns, Horie, and Dudle (U.S. Patent No. 5,570,291). The applicant disputes these rejections under 35 U.S.C. §103(a).

The Examiner rejected the claims in view of Burns, calling out U.S. Patent No. 5,063,506. U.S. Patent No. 5,063,506 is the Brockwell patent. Because the Examiner cited new grounds of rejection in the November 10, 2003 Office Action in view of Burns et al., citing U.S. Patent No. 5,189,606 on the accompanying form PTO-892, the Applicant presumes that Burns U.S. Patent No. 5,189,606 is intended and has responded in prosecution and in this Appeal Brief according to that presumption. Although this error was pointed out in the Applicant's March 9, 2004 Amendment, no comment was made regarding the error, and the Office Actions continue to refer to Burns as U.S. Patent No. 5,063,506.

VII. ARGUMENT

Prior to discussing the rejections, one point will be made to render clear the language to be utilized in the argument section. By means of reference, a Buyer purchases an item from a Supplier, and

Supplier Cost + Supplier Profit = Buyer Cost.

As defined in the present Application,

Oughta Cost + Gross Profit = Purchase Price.

The Purchase Price and the Buyer Cost are what the Buyer pays the Supplier for an item. Although Supplier Cost and Oughta Cost (or ought-to-be cost) are not necessarily the same, neither includes a profit amount for the Supplier, and neither Supplier Cost nor Oughta Cost represents the amount a Buyer will pay a Supplier for an item because no profit is included. Thus, the Supplier's Cost needs to be distinguished from the Buyer Cost. Further, the lowest cost potential does not include profit.

The references cited by the Examiner (Burns, Horie, and Dudle), refer to Buyer Cost, not Supplier Cost, Oughta Cost, or lowest cost potential, as set forth in the specification and claims of the present Application.

A. Claims 1, 8, and 13-20 stand rejected under 35 U.S.C. §103(a) given Burns in view of Horie.

Prior to discussing the merits of the Examiner's position, the applicant believes it would be helpful to first briefly describe and characterize the Burns reference.

THE BURNS REFERENCE

The following 10 examples from Burns illustrate how Burns teaches a costing method that utilizes a variety of calculations and factors (shown in italics) to estimate/calculate costs, which calculations and factors are incapable of yielding a lowest potential cost. Burns is concerned about accurately predicting Buyer Cost, not Supplier Cost.

> It includes a means according to feature 2 to calculate the direct cost of construction including all of the *work necessary to build the facility in the location specified* using any one or a combination of three estimating methods. It includes a ***comparative method*** *based on* ***historical costs*** *of projects* at the facility type level of the hierarchy with adjustment factors that break the costs down to the Element level of the hierarchy [Column 6, lines 10-18, emphasis added].

It includes a process according to feature 15 which combines facility categories together into facility types; allows the user to select limits on facility size, location, data sources, and units of measure; selects the facility family to assign to this facility type; allows the user to ***select the escalation rates used***; and then ***performs a regression on the data*** using one of the following equations at the users option to determine the equation coefficients for the primary facility: ... [Column 6, lines 50-58, emphasis added].

It includes a means according to feature 2 to identify and apply modifiers to the direct costs for different construction methods; for risk associated to the project; to adjust the project schedule; to ***adjust the cost for differences*** *in material, labor and equipment prices at different locations*; ***for the effects of inflation over time***; to account for supervision and inspection of the construction; *pay for the design*; and pay for unforeseen conditions that may be encountered during construction. It includes a process that links the modifiers to the direct cost at different levels of the hierarchy structure [Column 15, lines 26-36, emphasis added].

A ***regression analysis*** is performed for the three major supporting facility categories by family category code using the following nonlinear equation: ... Additionally, ***averages*** *for each of the three major supporting facility categories are taken* to determine the percentage split between them [Column 27, lines 19-28, emphasis added].

Create Modifier Sets. This section (FIG. 8, comprising FIGS. 8a-8e) of CCMAS processes modifiers to the direct costs. There are seven modifiers included in this section of CCMAS. They are for Construction Methods, Project Definition, Project Schedule, location, Escalation, Construction Management, and Project Design. *All of the CCMAS cost data (historical, line items, etc.) is* ***normalized*** *to a specific location and time frame.* This *normalization* also covers the productivity factors used to determine how much labor and equipment is used in the composite items. The modifiers are used to adjust the CCMAS costs to account for differences in construction techniques; labor productivity; costs for materials, labor, and equipment; account for supervision and inspection of the construction; pay for the design; and pay for unforeseen conditions that may be encountered [Column 42, line 62 through column 43, line 10, emphasis added].

Construction Methods Modifier. This modifier is used to ***adjust project costs*** by the 18 CSI Divisions and five CCMAS resources (material cost, labor cost, equipment cost, labor hours, and equipment hours) ***by location***. It is used to account for different materials, labor, and equipment used in different locations, especially overseas. *It is not a location adjustment to account for different prices and wages, that is the location modifier.* This modifier is used to account for one location using labor by hand to excavate a trench vs using equipment. This modifier adjusts the labor and equipment hours used to get the total cost [Column 43, lines 14-25, emphasis added].

d. Location Modifiers. The location modifiers are developed based on surveys of a breadbasket of materials, labor, and equipment in the location. Factors are

developed by CSI Division for material, labor, and equipment. *These factors are **normalized** to the Department of Defense 144 city **average***. The 144 cities are three cities from each of the 48 continental states that are near major military installations. These location factors are used by other modules to ***normalize** the knowledge base to this same 144 city **average***. The factors are used to *adjust the data base costs to costs in the location of the project* [Column 44, lines 45-56, emphasis added].

e. Escalation Factors. ***Escalation modifiers*** are developed by the Office of Management and Budget (OMB) and distributed by the Department of Defense. These factors are developed by major program, appropriation type, and as of date. Each major Air Force project may use a different set of escalation factors depending upon the project and appropriation used for the project. CCMAS stores the escalation factors to account for each difference. In addition to having the data *normalized to the 144 city average*, all appropriate data in CCMAS is ***normalized** to a specific point in time*. This point in time is stored in the Table (T116). This reference point is used to determine the *escalation factors used for the project* [Column 44, line 67 through 45, line 12, emphasis added].

(7) Contractor Modifier Generic Model Workman's Compensation by CSI Division Table--T159. This table maps the 23 trades used for workmen's compensation to the 18 CSI Divisions. This data was developed based on expert experience. It is used to apply the 23 workman's compensation factors by CSI Division. For example, CSI Division 08--Doors, Window, & Glass uses 35% General Carpentry, 35% Glaziers, and 30% Steel Erection--Doors & Sash. Therefore, the overall workmen's compensation factors for CSI Division 08 is ***weighted average** of these three items using the percentages in this table* [Column 48, lines 37-48, emphasis added].

Direct costs are brought from the 144 *City **National Average*** of the data base to the specific place and time of construction using modifiers. Material, labor, and equipment costs can be adjusted by CSI and then ***escalated*** to the appropriate period of construction. Contractor costs and profits are added to modified directs costs to create the construction contract cost [Column 66, lines 27-33, emphasis added].

The above examples from Burns show that he describes a method of obtaining costs for a construction project such as building or road based on averaged, weighted-averaged, normalized, regressed, escalated, historical, adjusted, and geographically-fixed costs. Averaged, normalized, regressed, escalated, historical, actual, and/or geographically-fixed costs will not yield a lowest potential cost, as one of skill in the art would recognize from the function being performed.

If Burns teachings were applied to a component, the Burns estimate would be higher than an application of the present invention. Some of the above examples that illustrate how Burns' analysis would not result in a lowest cost potential are described in more detail below

Escalation factors increase costs, and thus would not result in a lowest cost potential.

Accounting for differences in cost based on location will not result in the lowest cost potential, unless you happen to be in the area where the lowest costs already exist. Accounting for inflation and unforeseen conditions will also escalate the amount, and would not result in a lowest cost potential.

Regression analysis tends to provide a mean value of a random variable when independent variables have specific values.

By taking an average, a mid-range value is found, and the lowest cost potential will not be found because averaging *eliminates* the lowest value.

As with averaging, normalizing finds a mid-range value, and does not result in the lowest cost potential because normalizing eliminates the lowest cost potential.

The lowest cost potential does not take into account unknown conditions because the lowest cost potential assumes no unknown conditions that would cause the cost to grow.

Burns includes numerous additional examples of similar methods of estimating that do not result in identifying **lowest-cost potential**.

Burns is concerned with construction projects, not individual components or services, and many of his teachings relate to construction projects and not individual components or services. Burns is concerned about obtaining estimates for budgeting purposes, not obtaining lowest cost potential estimates to negotiate with a supplier, as set forth in claim 1, for example. The present application could be applied to a construction project such as those referred to by Burns, and the present invention would most certainly come up with a lowest cost potential that would be *significantly* lower than an application of **actual** cost of Burns' teachings because Burns is attempting to come up with the *actual* cost, including cost-overruns, regional labor costs, typical delays, and so forth, and thus Burns is incapable of determining the lowest potential cost. For example, Burns teaches *estimating* labor costs from the geographical or regional area where the construction project is being built, because Burns knows labor will only come from that region. As stated by Burns in column 3, lines 49-51, one of the capabilities of his tool is that it "Automatically adjusts the cost of each material, labor, and equipment item used in construction for regional price variations." The present application, on the other hand, would find the lowest potential cost for labor in ***all*** regions, not just one area, in order to find the lowest potential cost. Burns' actual costs typically include profits, tier 1 and/or tier 2 supplier pass-throughs, delay charges, cost-overruns, and often are geographically fixed, which components would not be included in a lowest cost potential.

Prior to discussing the merits of the Examiner's position, the applicant believes it would be helpful to first briefly describe and characterize the Horie reference.

THE HORIE REFERENCE

The following examples from Horie illustrate how Horie teaches a costing method that utilizes a variety of calculations including weighed averaging, correcting, and estimating to estimate/calculate costs, which calculations and factors are incapable of yielding a lowest potential cost. Horie is concerned about accurately predicting Buyer Cost, not Supplier Cost.

> A data estimating system for estimating a value of the highest probability which would correspond to a desired factor by statistically processing data having been determined from a plurality of factors. The factors are roughly divided into basic factors and environmental factors, and each of which is further classified into predetermined grades. The basic factor is a factor which would most generally affect on the determination of the data value. *A **weighed average** is calculated in each class of the basic and environmental factors to be subject to statistical processing.* The weighed average of the basic factor is then ***corrected** by the use of a ratio of the weighed average of the environmental factor to the weighed average of all data as a **correcting index***, so as to provide a final estimation value. Thus using the environmental factor as a correcting index would enable to provide a result with high accuracy of estimation by simple calculation process. [Abstract, emphasis added].
>
> On the other hand, a data estimating system according to this invention calculates **weighed average** values in each class of the basic and environmental factors and statistically processes them, but calculates a ***ratio of weighed average*** in each class of the basic factors to a weighed average of all data as a basic factor distribution. The basic factor distribution is then ***multiplied by a weighed average value*** of each class of the environmental factor as a characteristics value, so as to provide a final estimation. In this manner, it is possible to make estimation of influence which an environmental factor acts on the data by calculating a ratio of a value obtained by statistically processing data classified by the basic factor to the whole small mother group as the basic factor distribution, and then multiplying the basic factor distribution by a weighed average value of data classified into grades of environmental yardstick containing desired factors. [Column 4, lines 42-58, emphasis added]

Horie sets forth a Buyer Cost estimating system that utilizes weighed averages and taking of ratios, which, as shown above, do not result in the **lowest cost potential**.

Horie, like Burns, teaches a system that attempts to estimate *actual* Buyer Costs, including Supplier profits, and not lowest cost potential for Supplier Costs. Both Burns and Horie teach tools utilized for budgeting, not tools that can be utilized to negotiate.

Horie, like Burns, teaches a system that estimates and weighs values that include supplier profit, and does not eliminate supplier profit from the equation, neither Horie nor Burns provide the advantage of being able to discuss Supplier Cost, and not just Buyer Cost, as most suppliers prefer to do. By eliminating supplier profit, and utilizing lowest cost potential, a Buyer is able to identify and discuss areas for improved Supplier Cost (e.g., material, transportation, scrap rate, uptime) with a Supplier to reduce the Supplier Cost and ultimately reduce the Buyer Cost, rather than dealing with a Supplier quote that hides the Supplier Cost and Supplier Profit. Horie and Burns thus fail to identify areas where cost can be reduced through a lowest cost potential, because Horie and Burns are simply utilizing historical data, trends, and other data that include profit to accurately estimate Buyer Costs, without eliminating the hidden profit and Supplier Cost issues from the equation. Being accurate at determining the actual costs is unrelated to determining the *lowest cost potential*.

Thus, Burns and Horie fail to teach or suggest, nor do their methods provide, the following advantages set forth in the present Application:

> After the cost that a part ought to be has been determined, discussions can then be initiated with potential suppliers. The manufacturing processes and the supply chain management techniques used to develop the ought-to-be cost, along with all other data that went into the ought-to-be cost, re disclosed. The supplier would be given the opportunity to explain how his price was arrived at and the individual components of the two total costs would be compared. In this way, it would become apparent which components are responsible for the differences. For example, if the supplier includes a figure for delivering the part to the purchaser that is considerably higher than the amount used for delivering in the ought to cost total, then this cost would be scrutinized by both parties. The result may be that the supplier could engage a different carrier or open a new facility closer to the customer and reduce this cost. Another possibility may be that the supplier is using obsolete methods or tools, and his cost could be brought in line with the ought to cost figure if he used a new process and new machines. [Paragraph 81; page 7, line 23 through page 8, line 7]

None of the citations from Burns and Horie teach or suggest lowest cost potential or ought-to-be cost nor the advantages of identifying a lowest cost potential or ought-to-be cost.

Because an Oughta Cost, or ought-to-be cost, is a value that is not an amount that one would actually pay a Supplier for an item because no Supplier Profit is included, and because Burns and Horie both estimate the actual Buyer Cost including the Supplier Profit, Burns and Horie do not teach nor suggest obtaining an ought-to-be cost nor the lowest cost potential.

Thus, neither Burns nor Horie, alone or in combination, teach or suggest the following elements from the independent claims, with emphasis added:

Claim 1: using a computerized process that includes databases from which aspects of the cost are capable of being determined, provided **lowest cost potential** design, **lowest cost potential** manufacturing practices, **lowest cost potential** supply chain management techniques, **lowest cost potential** labor rates, **lowest cost potential** uptimes and **lowest cost potential** yields are utilized;

determining, by the computerized process, a **lowest potential cost** for each of a plurality of aspects of the cost and totaling the **lowest potential cost** for each of a plurality of aspects, *yielding the ought to be cost*;

Claim 8: identifying and quantifying the cost components of a part or step of a process that, when totaled, determine what the cost of the part or process *ought to be* provided the **lowest cost potential** design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields;

determining the **lowest cost potential** for each component of the part or step of the process;

totaling the **lowest cost potential** for each of the cost components and recording this as an *ought-to-be cost*;

Claim 13: determining, by a computer, a **lowest cost potential** from a plurality of costs for at least two manufacturing factors for manufacturing the part, wherein the at least two manufacturing factors include at least two of: manufacturing practices to manufacture the part, supply chain management techniques to supply the part, labor rates to make the part, uptime for equipment utilized to manufacture the part, yields of manufacturing the part, overhead, freight, and equipment utilized to manufacture the part;

combining, by a computer, the **lowest cost potential** for at least the at least two manufacturing factors, yielding an *ought-to-be cost* for the part.

Claim 15: determining, by a computer, a **lowest cost potential** for the first design for each of two or more of a plurality of manufacturing factors for manufacturing the part, wherein the plurality of manufacturing factors includes: labor rates, material costs, overhead costs, capital costs, fabrication waste rates, uptime for equipment utilized to manufacture the part, and yields of manufacturing the part;

generating, by the computer, an *ought-to-be cost* for the part from the **lowest cost potential** for the first design for each of the two or more manufacturing factors;

Claim 18: by a computer, identifying a plurality of cost components of a part and determining, from among a plurality of costs for the plurality of cost

components, a **lowest cost potential** for each of the plurality of cost components of the part, wherein the cost components include costs related to at least one of material, labor, capital, machining, and overhead;

totaling, by a computer, the **lowest cost potential** for each of the plurality of cost components of the part, resulting in an *ought-to-be cost* for the part;

engaging in cost-driven discussions with a supplier to obtain an agreement with the supplier to provide parts at a price that is based upon the *ought-to-be cost*.

Thus, the claims of the present invention are not taught or suggested by Burns and/or Horie. Combining these references fails to teach or yield the invention as claimed. The combination of these references fails to teach or suggest all the elements of the claims. Further, one of skill in the art would not be motivated to make such a combination. Therefore, the present invention is not obvious in light of any combination of Burns and/or Horie.

Furthermore, claims 13, 14, 16, 17, 19, and 20 are dependent upon an independent claim that is shown to be allowable. For all these reasons, the dependent claims are themselves allowable.

Because none of Burns and/or Horie alone or in combination teaches the elements of claims 1, 8, and 13-20, the Examiner has failed to support a 35 U.S.C. §103(a) rejection of claims 1, 8, and 13-20, the Applicant respectfully submits that claims 1, 8, and 13-20 may be passed to allowance.

B. Claims 2-7 and 9-12 stand rejected under 35 U.S.C. §103(a) in view of Burns, Horie, and Dudle.

Prior to discussing the merits of the Examiner's position, the applicant believes it would be helpful to first briefly describe and characterize the Dudle reference.

THE DUDLE REFERENCE

Dudle is concerned about accurately predicting Buyer Cost, not Supplier Cost. As set forth in Dudle:

A system and method for generating estimates and orders for the manufacture of custom items such as business forms is provided which stores estimate data at a central location, e.g., a corporate office, for access by sales representatives at remote sales sites. A sales representative creates an item specification for a form to be manufactured and electronically transmits it to the corporate office for estimate data.

> Data relating to the cost and list price to produce the form based on the item specification is transmitted to the sales representative. The sales representative determines a sell price from the pricing data, and generates a production order using the item specification and the estimate data, among other data. The production order is transmitted to a manufacturing plant for job execution. The system manages a centralized repository of item specification, estimate and customer contract data, among other types of data, for analysis and reporting which can be accessed by computers at different manufacturing plants and sales sites. [Abstract].

Dudle sets forth a Buyer Cost estimating system that estimates costs for business supplies such as forms or labels, and does not teach or suggest obtaining the **lowest cost potential**. The Examiner does not rely on Dudle as teaching either an ought-to-be cost or lowest cost potential, as set forth in the claims, but rather for Dudle's networking capabilities.

As shown above, neither Burns nor Horie teaches or suggests an ought-to-be cost or lowest cost potential. Thus, neither Burns, Horie, nor Dudle, alone or in any combination, teach or suggest the following elements from the independent claims, with emphasis added:

Claim 2: for each cost area, totaling a **lowest cost potential** for each cost component, yielding a plurality of subtotals;

totaling each of the plurality of subtotals, yielding a **lowest potential cost** that is the *ought to be cost* of the part or service.

Claim 5: one or more computer screens for said computer program including input fields into which **lowest cost potential** cost components are capable of being inputted and menus that display list of selectable cost components from said database;

said computer program having the capability to determine a **lowest cost potential** for each of a plurality of cost components and to total each of the plurality of **lowest cost potential** cost components, yielding the *ought to be cost* of the part or service.

Claim 9: establishing a database that interfaces with said computer program, the database containing fact-based cost components that are utilized to calculate what the cost ought to be provided the **lowest cost potential** design, **lowest cost potential** manufacturing practices, **lowest cost potential** supply chain management techniques, **lowest cost potential** labor rates, **lowest cost potential** uptimes and **lowest cost potential** yields;

wherein the computer program has the capability of making any necessary calculations for each cost component, determining a **lowest cost potential**

for each cost component, and totaling the **lowest cost potential** for each cost component, thereby yielding the *ought-to-be cost* of the part or service.

Thus, the claims of the present invention are not taught or suggested by Burns, Horie, and/or Dudle. Combining these references fails to teach or yield the invention as claimed. The combination of these references fails to teach or suggest all the elements of the claims. Further, one of skill in the art would not be motivated to make such a combination. Therefore, the present invention is not obvious in light of any combination of Burns, Horie, and/or Dudle.

Furthermore, claims 3, 4, 6, 7, and 10-12 are dependent upon an independent claim that is shown to be allowable. For all these reasons, the dependent claims are themselves allowable.

Because none of Burns, Horie, and/or Dudle alone or in combination teaches the elements of claims 2-7 and 9-12, the Examiner has failed to support a 35 U.S.C. §103(a) rejection of claims 2-7 and 9-12, the Applicant respectfully submits that claims 2-7 and 9-12 may be passed to allowance.

D. Summary of Argument

Burns, Horie, and/or Dudle teach methods of estimating actual Buyer Costs with averaging, weighing, and other methods that include Suppler Profit, and do not teach not lowest cost potential or ought-to-be cost for Supplier Costs that do not include Supplier Profit. Burns, Horie, and/or Dudle fail to support a 35 U.S.C. §103(a) rejection, and the combination of Burns, Horie, and/or Dudle fails to teach or suggest all the elements and combinations of the claims, thus it would not be obvious to produce the invention as claimed from these references, and the 35 U.S.C. §103(a) rejections are not supported. Thus, all rejections are shown to be traversed. Withdrawal of the rejections under 35 U.S.C. §103(a) and a Notice of Allowance of claims 1-20 are hereby respectfully requested.

VIII. CLAIMS APPENDIX

Claims 1-20 are involved in the appeal and are reproduced below.

1. A method of doing business in which the cost of a component, service or process is established by:

using a computerized process that includes databases from which aspects of the cost are capable of being determined, provided lowest cost potential design, lowest cost potential manufacturing practices, lowest cost potential supply chain management techniques, lowest cost potential labor rates, lowest cost potential uptimes and lowest cost potential yields are utilized;

determining, by the computerized process, a lowest potential cost for each of a plurality of aspects of the cost and totaling the lowest potential cost for each of a plurality of aspects, yielding the ought to be cost;

generating reports from said computerized process that include details of each aspect of the cost;

providing the reports to prospective suppliers of the component or service;

conducting discussions, with the prospective suppliers of the component or service, in an effort to gain concurrence on the fact basis of what the cost of the component, service or process ought to be;

conducting fact based discussions, with prospective suppliers of the component or service with whom concurrence on the cost has been reached, in an effort to reach an agreement on a price for the component, service or process based on the ought to be cost of the component, service or process.

2. In a computerized system, a method of determining what the cost of a part or service ought to be, the method comprising:

establishing one or more databases that store a plurality costs distributed among each of a plurality of cost components that are utilized for producing parts and services, wherein the cost components include one or more of: design, manufacturing practices, supply chain management techniques, labor rates, uptimes, and yields;

providing a database interface for the database that allows remote access by one or more users;

establishing a set of computer screens, including input fields into which cost components are capable of being inputted either directly or through menus that display options that are capable of being selected, wherein the cost components are elements of cost areas such as material, labor, capital, manufacturing and overhead;

for each cost area, totaling a lowest cost potential for each cost component, yielding a plurality of subtotals;

totaling each of the plurality of subtotals, yielding a lowest potential cost that is the ought to be cost of the part or service.

3. The method as set forth in claim 2 wherein the following further step is performed:

printing out a report for a screen describing the components of the screen and the inputted amounts and the subtotal for the screen.

4. The method as set forth in claim 2 wherein the following further step is performed:

printing out a report for all screens describing the components of each screen, the inputted amounts for each component, the subtotal for each screen and a total for all screens.

5. A computer system for determining what the cost of a part or service ought to be, said computer system comprising:

a computer program that provides for cost data entry, is capable of interfacing with a database or databases and is capable of being accessed by one or more users, said computer program being programmed to perform computations on data that has been input manually or from a database;

a database that is capable of interfacing with said computer program, the database containing cost components for parts;

one or more computer screens for said computer program including input fields into which lowest cost potential cost components are capable of being inputted and menus that display list of selectable cost components from said database;

said computer program having the capability to determine a lowest cost potential for each of a plurality of cost components and to total each of the plurality of lowest cost potential cost components, yielding the ought to be cost of the part or service.

6. The computer system as set forth in claim 5 wherein the computer program has the capability to print out a report for a screen describing the components of the screen, the inputted amounts and the subtotal for the screen.

7. The computer system as set forth in claim 5 wherein the computer program has the capability to print out a report for all screens describing the components of each screen, the inputted amounts for each component, the subtotal for each screen and a total for all screens.

8. A method of using a computer to develop a factual report used in fact driven discussions with a supplier in an effort to establish what the cost of a part or service ought to be, comprising the steps of:

identifying and quantifying the cost components of a part or step of a process that, when totaled, determine what the cost of the part or process ought to be provided the lowest cost potential design, manufacturing practices, supply chain management techniques, labor rates, uptimes and yields;

inputting into the computer a plurality of possible costs for the cost components;

making necessary calculations for each component of the part or step in the process;

determining the lowest cost potential for each component of the part or step of the process;

totaling the lowest cost potential for each of the cost components and recording this as an ought-to-be cost;

outputting from the computer program a report that specifies the cost of each part or process and how each component of this cost was established; and

utilizing this report in cost driven discussions with a supplier to obtain an agreement with the supplier to provide parts or services at a price that is based upon the ought-to-be cost.

9. A method of using a computer to facilitate identifying and quantifying cost components of a part or service, the method comprising the following steps:

utilizing a computer program that is capable of interfacing with one or more databases, said computer program being available on a network that allows remote access by one or more users;

establishing a database that interfaces with said computer program, the database containing fact-based cost components that are utilized to calculate what the cost ought to be provided the lowest cost potential design, lowest cost potential manufacturing practices, lowest cost potential supply chain management techniques, lowest cost potential labor rates, lowest cost potential uptimes and lowest cost potential yields;

establishing a set of computer screens for said computer program including input fields into which component cost is capable of being inputted and menus that display options of component cost from said database, wherein the cost components are elements of cost areas such as material, labor, capital, manufacturing and overhead;

wherein the computer program has the capability of making any necessary calculations for each cost component, determining a lowest cost potential for each cost component, and totaling the lowest cost potential for each cost component, thereby yielding the ought-to-be cost of the part or service.

10. The method of using a computer as set forth in claim 9 wherein the following further step is performed:

printing out a report for a screen describing the components of the screen, the inputted amounts and the subtotal for the screen.

11. The method of using a computer as set forth in claim 9 wherein the following further step is performed:

printing out a report for all screens describing the components of each screen, the inputted amounts for each component, the subtotal for each screen and a total for all screens.

12. The computer system of claim 5, wherein the computer system is accessible from a network by authorized users of the network.

13. A method comprising the steps of:

determining a design for a part;

determining, by a computer, a lowest cost potential from a plurality of costs for at least two manufacturing factors for manufacturing the part, wherein the at least two manufacturing factors include at least two of: manufacturing practices to manufacture the part, supply chain management techniques to supply the part, labor rates to make the part, uptime for equipment utilized to manufacture the part, yields of manufacturing the part, overhead, freight, and equipment utilized to manufacture the part;

combining, by a computer, the lowest cost potential for at least the at least two manufacturing factors, yielding an ought-to-be cost for the part.

14. The method of claim 13, further comprising the step of conducting discussions over the ought-to-be cost for the part with one or more prospective suppliers of the part in an effort to reach an agreement a price to pay a chosen supplier for the part.

15. A method comprising the steps of:

determining a first design for a part;

determining, by a computer, a lowest cost potential for the first design for each of two or more of a plurality of manufacturing factors for manufacturing the part, wherein the plurality of manufacturing factors includes: labor rates, material costs, overhead costs, capital costs, fabrication waste rates, uptime for equipment utilized to manufacture the part, and yields of manufacturing the part;

generating, by the computer, an ought-to-be cost for the part from the lowest cost potential for the first design for each of the two or more manufacturing factors;

determining a purchase price with at least one supplier while utilizing the ought-to-be cost.

16. The method of claim 15, further comprising the steps of modifying the lowest cost potential for at least one of the plurality of manufacturing factors and generating an updated ought-to-be cost for use in discussions with a supplier.

17. The method of claim 15, further comprising the steps of determining a second design for the part;

determining, by the computer, a lowest cost potential for the second design for each of at least two of the plurality of manufacturing factors;

generating, by the computer, an ought-to-be cost for the part from the lowest cost potential for the first design for each of the two or more manufacturing factors and the lowest cost potential for the second design for each of the at least two manufacturing factors.

18. A method comprising the steps of:

by a computer, identifying a plurality of cost components of a part and determining, from among a plurality of costs for the plurality of cost components, a lowest cost potential for each of the plurality of cost components of the part, wherein the cost components include costs related to at least one of material, labor, capital, machining, and overhead;

totaling, by a computer, the lowest cost potential for each of the plurality of cost components of the part, resulting in an ought-to-be cost for the part;

engaging in cost-driven discussions with a supplier to obtain an agreement with the supplier to provide parts at a price that is based upon the ought-to-be cost.

19. The method of claim 18, wherein the cost components relate to at least one of a design for the part, manufacturing practices, supply chain management techniques, labor rates, uptimes, and yields.

20. The method of claim 18, further comprising the steps of establishing a database that contains the lowest cost potential cost components and utilizing a computer program to obtain the ought-to-be cost for the part.

IX. EVIDENCE APPENDIX

No evidence was submitted pursuant to 37 C.F.R §1.130, §1.131, or §1.132.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings are submitted herewith.

Respectfully submitted,

Date: May 1, 2006

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